USSR: PROMOTING PLUTONIUM PRODUCTION BAN BY MEANS OF THREATS [redacted]

A GENERAL STAFF OFFICIAL RECENTLY TOLD A US DELEGATION THAT, UNLESS A US-SOVIET PLUTONIUM PRODUCTION BAN IS NEGOTIATED, THE SOVIETS WILL BUILD FACILITIES THAT CAN PRODUCE PLUTONIUM BY LASER ISOTOPE SEPARATION. THIS IS THE FIRST TIME THE SOVIETS HAVE LINKED POSSIBLE US FAILURE TO RESPOND TO A BAN INITIATIVE TO THEIR CONSTRUCTION OF NEW PRODUCTION CAPACITY. [redacted]

[redacted]

NR

[redacted]

2. USSR: PROMOTING PLUTONIUM PRODUCTION BAN BY MEANS OF THREATS [redacted]

[redacted] THE SOVIETS EXPECT TO HALT THEIR PRODUCTION OF PLUTONIUM BY 1995. [redacted] ADDED THAT THE SOVIETS WOULD LIKE TO NEGOTIATE A BAN ON PLUTONIUM PRODUCTION TO AVOID THE NECESSITY OF BUILDING NEW FACILITIES FOR PRODUCING PLUTONIUM USING THE "LASER TECHNIQUE" THAT THE UNITED STATES HAS DEVELOPED. [redacted]

COMMENT: [redacted] STATEMENT IS THE FIRST INDICATION THAT FAILURE OF THE UNITED STATES TO RESPOND TO THE SOVIET INITIATIVE FOR A FISSIONABLE MATERIALS BAN COULD LEAD THE SOVIETS TO CONSTRUCT ADDITIONAL PLUTONIUM PRODUCTION CAPACITY. LAST YEAR, THE SOVIETS ANNOUNCED PLANS TO PHASE OUT ALL PLUTONIUM PRODUCTION REACTORS DURING THE 1990S, RETAINING ONLY TWO OR THREE TRITIUM PRODUCTION REACTORS. THIS PLAN HAS PREVIOUSLY NOT BEEN LINKED TO ANY ARMS CONTROL AGREEMENT, EVEN THOUGH THE SOVIETS HAVE FOR SEVERAL YEARS BEEN ADVOCATING A BAN ON THE PRODUCTION OF FISSIONABLE MATERIAL. [redacted]

THE SOVIETS ARE EXPERIENCED IN BOTH LASER ISOTOPE SEPARATION (LIS) AND CENTRIFUGE TECHNIQUES, ALTHOUGH THE EXTENT OF THEIR EXPERIENCE WITH PLUTONIUM ISOTOPE SEPARATION IS UNKNOWN. WE DO NOT BELIEVE, HOWEVER, THAT THE SOVIETS ARE READY TO BEGIN CONSTRUCTION OF A LIS-BASED PLANT FOR PLUTONIUM ISOTOPE SEPARATION. WE HAVE NO EVIDENCE THAT THEY HAVE DEVELOPED THE TECHNOLOGY AND EQUIPMENT NEEDED FOR THE SEPARATION MODULES FOR A FULL-SCALE PLANT. NOR HAD THEY ANY INCENTIVE TO DEVELOP SUCH EQUIPMENT UNTIL VERY RECENTLY, AS DEDICATED MILITARY REACTORS MEET THEIR NEEDS FOR WEAPONS-GRADE PLUTONIUM, AND THE PLUTONIUM RECOVERED FROM POWER REACTORS WAS ALLOCATED TO THE NOW-FALTERING BREEDER PROGRAM. A SOVIET DECISION TO PROCEED WITH LIS FOR PLUTONIUM PRODUCTION WOULD BEGIN WITH

RESEARCH AND ENGINEERING, NOT FACILITY CONSTRUCTION. IN CONTRAST, A PLUTONIUM ISOTOPE SEPARATION PLANT USING THE

/****** BEGINNING OF SECTION 004 ******/
CENTRIFUGE PROCESS PROBABLY COULD BE CONSTRUCTED RELATIVELY RAPIDLY.

ALTHOUGH WE HAVE NO EVIDENCE THAT THE SOVIETS ARE PRODUCING WEAPONS-GRADE PLUTONIUM USING ISOTOPIC ENRICHMENT, THE USSR HAS RECOVERED SIGNIFICANT AMOUNTS OF POTENTIAL SOURCE MATERIAL--REACTOR-GRADE PLUTONIUM FROM REPROCESSED POWER REACTOR FUEL. THIS PLUTONIUM HAS LARGE AMOUNTS OF THE HEAVIER PLUTONIUM ISOTOPES, MAKING IT POORLY SUITED FOR USE IN WEAPONS ALTHOUGH SATISFACTORY FOR ITS INTENDED USE IN THE SOVIET BREEDER REACTOR PROGRAM. ALTHOUGH REACTOR FUEL REPROCESSING BEGAN IN THE LATE 1970S, THE SOVIET BREEDER PROGRAM HAS SLOWED TO A HALT SINCE 1988, LEAVING A LARGE INVENTORY OF RECOVERED REACTOR-GRADE PLUTONIUM WITH NO APPARENT USE. WE ESTIMATE THAT THE SOVIETS HAVE RECOVERED ABOUT 20 TONS OF REACTOR-GRADE PLUTONIUM, WHICH COULD BE UPGRADED THROUGH LIS OR CENTRIFUGE TECHNIQUES TO YIELD 14 TONS OF WEAPONS-GRADE PLUTONIUM, INCREASING THEIR TOTAL WEAPONS-GRADE INVENTORY BY ABOUT 10 PERCENT. SOVIET REPROCESSING CAPACITY COULD PROVIDE AN ADDITIONAL 2 TO 3 TONS OF REACTOR-GRADE PLUTONIUM PER YEAR, WHICH COULD YIELD 1.4 -O 2.1 TONS OF WEAPONS-GRADE PLUTONIUM PER YEAR.